

REMARKS

The Office Action mailed on February 23, 2010, has been received and its contents carefully considered. A Petition for one-Month Extension of Time and a Request for Continued Examination under 37 C.F.R. §1.114 are submitted herewith.

Claims 1-20 will be pending in this application upon entry of this Amendment. By this Amendment, claims 1, 11 and 13 are amended. Claims 1, 11 and 13 are the independent claims. Claims 15-20 has been added to more particularly describe and distinctly claim the subject matter. Support for claim 15 may be found, for example, at para. [0053] of the published application and support for new claim 16 may be found at, for example, para. [0044]; and support for claims 17-20 may be found at least at para. [0043]-[0044] and FIG. 7a. Reconsideration of this application in view of the above amendments and the following remarks, respectfully is requested.

The Examiner has rejected claims 1-5 and 8-10 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2001/0035310 to *Tsuboi* et al. (hereinafter "*Tsuboi*") in view of JP 2003-013989 to *Yutaka* (hereinafter "*Yutaka*"). The Examiner has rejected claims 6 and 7 under 35 U.S.C. §103(a) as being unpatentable over *Tsuboi*, in view of *Yutaka* and U.S. Patent No. 2,135,634 to *Byrom* (hereinafter "*Byrom*"). Claims 11-14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over *Tsuboi* in view of

U.S. Patent Application Publication No. 2,034,001 to Ricefield (hereinafter "*Ricefield*").

Claim 1 recites an electric power steering device including, among other features, that the power transmission faces of the engagement arms include a first power transmission face having a first interference fit and a second power transmission face having a second interference fit, the first interference fit being larger than the second interference fit such that the first power transmission faces flatten at a slower rate than the second power transmission faces, and each of the first and second engagement members includes a respective engagement projection that engages a respective first power transmission face of an engagement arm, and another respective engagement projection that engages a respective second power transmission face of an engagement arm. Support for these features may be found, for example, at FIG. 5 and para. [0053] of the published application.

The Office Action states that *Tsuboi* discloses a first annular engagement member 41b, a second annular engagement member 42b, and an elastic member 40 with an annular main body and engagement arms between the members (Office Action, page 2). The Office Action states that *Tsuboi* specifically fails to disclose differences in the size of engagement surface or differences in thickness of spacing of the engagement arms or projections, but that mechanical systems are not perfectly manufactured and will include differences among parts, even those designed to be essentially the same configuration (Office Action, page 2).

AMENDMENT

10/587,316

While Applicants disagree with the Office Action's position, applicants have nevertheless amended claim 1 to reflect a specific structural difference between the engagement arms. Specifically, claim 1 recites that that the first interference fit is larger than the second interference fit such that the first power transmission faces flatten at a slower rate than the second power transmission faces, and each of the first and second engagement members includes a respective engagement projection that engages a respective first power transmission face of an engagement arm, and another respective engagement projection that engages a respective second power transmission face of an engagement arm. This reflects an intentional design choice to achieve a specific goal (e.g., the interference fits flatten at different rates), not a random variation in manufacture.

As pointed out in the specification, even if the engagement arms 45 of the elastic member 43 are flattened during prolonged use, the power transmission faces 460 of the engagement arms 45 each originally having the relatively great interference d1 still have sufficient interferences (para. [0053]). Therefore, the torque transmission is mainly achieved through the power transmission faces 460 of the engagement arms 45 (para. [0053]). As a result, noise and torque transmission variation can be suppressed for a long period of time (para. [0053]).

Furthermore, in the Office Action's example, it seems that there would not be any appreciable difference in the rates of flattening between different engagement members. If, however, the Examiner asserts an appreciable difference between rates of flattening between different engagement members

exists because mechanical systems are not perfectly manufactured and will include differences among parts, applicants submit that Official Notice must be taken of these alleged facts.

The Office Action goes on to state that *Yutaka* discloses an elastomeric member 17 in a power transmission joint that includes an annular main body 17b with projecting arms 17a and opposite faces of the arms have different engagement surfaces (Office Action, page 2). Claim 1 recites that each of the first and second engagement members includes a respective engagement projection that engages a respective first power transmission face of an engagement arm, and another respective engagement projection that engages a respective second power transmission face of an engagement arm. Applicants submit that *Yutaka* does not disclose or suggest these features.

Yutaka discloses that hub member 18 engages with a damper member 17 (abstract; FIG. 3). Similarly, wheel gear 16 engages with the damper member 17 (abstract; FIG. 3). Even assuming the Office Action is correct in stating that damper member 17 includes arms with different engagement surfaces, it does not appear that the wheel gear 16 and hub member 18 each engage an engagement surface having a first interference fit and a second engagement surface having a second interference fit on the damper member 17. Thus, *Yutaka* does not disclose or suggest that each of the first and second engagement members includes a respective engagement projection that engages a respective first power transmission face of an engagement arm, and another respective engagement

projection that engages a respective second power transmission face of an engagement arm.

In view of the above, no permissible combination of the applied references can reasonably be considered to teach or to suggest the combination of all of the features recited in claim 1. Claims 2-10 and 15-20 are also allowable, at least for their dependence on allowable claim 1 as discussed above, as well as for the separately patentable subject matter that each of these claims recites. Claims 11-14 are also patentable for the reasons given below.

Amended independent claim 11 recites an electric power steering device that comprises, among other features, a power transmission joint including an elastic member that has a first face and a second face, and that includes a plurality of engagement arms extending radially from a circumferential surface of the elastic member and increasing in width from the first face to the second face, wherein the first face and the second face are located on the circumferential surface of the elastic member. Support for these features may be found, for example, at FIG. 8.

The Office Action admits that *Tsuboi* fails to show engagement arms increasing in width from a first face to a second face (Office Action, page 4). Seeking to remedy these deficiencies the Office Action turns to *Ricefield* as disclosing an elastic member 50 with first and second faces connected to first and second engagement members, and each engagement arm 50a of the engagement member increases in width from a first face 45c to a second face 46c

(Office Action, page 4). However, as illustrated in FIG. 1, the first face 45c and second face 46c are not located on the circumferential surface of the intervening spider 50. Indeed, these faces 45c, 46c are on the sides of the spider 50, and not on a circumferential surface. Thus, *Ricefield* does not disclose or suggest a power transmission joint including an elastic member that has a first face and a second face, and that includes a plurality of engagement arms extending radially from a circumferential surface of the elastic member and increasing in width from the first face to the second face, wherein the first face and the second face are located on the circumferential surface of the elastic member. None of the other cited references remedy the deficiencies of *Ricefield* and *Tsuboi* as discussed above.

Claim 13 recites a power transmission joint with features similar to those of the power transmission joint recited in claim 11, and therefore is likewise patentable over the prior art. Similarly, support for the amended features may similarly be found, for example, at FIG. 8. Dependent claim 14 is also allowable at least for its dependence on claim 13.

Based on the above, it is submitted that this application is in condition for allowance, and such a Notice, with allowed claims 1-20, earnestly is solicited.

Should the Examiner feel that a conference would help to expedite the prosecution of this application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

An RCE and an extension fee are submitted herewith. However, should any additional fee be required, the Commissioner is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and advise us accordingly.

Respectfully submitted,



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Date

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